ABSTRACT

A forage bale dryer and method of operation is described, which is particularly adapted to dry large bales of forage material, such as hay, alfalfa, etc. The dryer has a bale support platform disposed between a lower and an upper plenum chamber, and the upper plenum chamber is spaced from the support platform to define an accessible stacking area for disposing one or more layers of forage bales onto the support platform. An air circulating passage is connected to the plenum chambers to direct a drying air flow there across. A sheet of flexible film material is disposed about the stack of bales and between the plenum chambers, whereby upon the application of a drying air flow, a negative pressure causes the flexible film material to collapse against the circumferential side surface of the stack of bales, whereby the drying air flow is confined through the stack. The drying air flow is also reversible by proper synchronization of valve plates in the air circulating conduits. The bidirectional airflow allows to achieve more uniform drying throughout the bales.